

Animals in Psi Research

This article describes parapsychological research involving animals, from relatively unsophisticated testing in the 1930s to the well-designed laboratory work of today.



Anecdotal Observations

Throughout history there have been reports of animals, both wild and domesticated, displaying putative psychic abilities. Notable behaviours in this regard include the inter-connectedness displayed by flocks of birds and shoals of fish, and the synchronization of termites and ants in building habitats.^[1] Anecdotal observations of such things have been the impetus behind long-standing research programs. Examples include:

Precognition of earthquakes: The Indian Ocean tsunami of 26 December 2004 killed up to 280,000 people but had minimal impact on the animal populations. There were reports of dogs, elephants and cattle moving away from the coast an hour before the waves hit, as if they sensed the impending catastrophe.^[2]

Homing abilities: In April 2016, a dog arrived at its former home in Wales having made a 240-mile twelve-day journey from its new home in the north of England that involved crossing several busy motorways.^[3] Similar stories involving pet dogs and cats are frequently reported in the media.

Disease detection: A diabetic woman about to go to sleep at night was forced to get up to attend to her pet cat, which (untypically) was behaving in a frantic manner. This caused symptoms of low blood sugar, alerting her to the fact that she had forgotten to check the levels before retiring, a potentially life-threatening lapse.^[4] Again, similar instances of unusual pet behaviour in connection with seriously ill owners are sometimes reported.

Such examples may be suggestive of psi ability but are not evidence of it. Even if confirmed, they may rather be the effect of unknown sensory systems, such as an ability to detect magnetic disturbances (earthquakes) or chemicals emitted because of illness (disease detection), having purely physical causes. For this reason, the study of animal psi is ideally carried out in controlled settings.

Early Research

Clever Hans

In early twentieth century Germany there was much public interest in a horse named Hans, which appeared able to answer simple arithmetic questions given to it verbally by tapping his hoof (for example, $5 + 9$ would elicit 14 taps). An initial investigation supported this claim, but a more thorough examination revealed that it was responding to subtle cues from its owner.^[5]

VL Durov

In the early 1920s a Russian circus entertainer named [Vladimir Leonidovich Durov](#) claimed to be able communicate with his animals, even to give them commands that they duly executed. Under the careful observation of electrical engineer Bernard Bernardovich Kazhinskiy, 696 experiments out of 1276 carried out over a two-year period appeared to support his claim.^[6] The experiments failed to work when conducted inside Faraday cages, suggesting a possible electromagnetic carrier for the telepathic information. Kazhinskiy preferred the term Biological Radio Communications, reflecting the materialist perspective among Russian investigators that persists today.

The Dog Max

In the 1930s, homing experiments with a dog called Max were carried out near Munich.^[7] The dog was escorted in a closed van to a randomly chosen location six miles from its home, then abandoned. The dog routinely made its way back home in about an hour, successfully navigating unfamiliar routes. Trained observers who watched its behaviour did not see it sniffing the ground or trees, suggesting that it was not making use of its sense of smell. Similar results were gained in other experiments, although not all.

Henry Blake

Henry Blake, a British horse trainer, carried out experiments over a 40-year period from the 1930s, testing his belief that bonded horses, especially siblings, share a telepathic connection. In one experiment he separated a bonded pair so that each was out of sight and earshot of the other, then fed one of them at an irregular time. In 21 of 24 trials the other became agitated and demanded food. In other experiments feeding was replaced by exercise, eliciting signs of excitement in the horse that was not being exercised. Likewise, pampering one horse with treats caused the other to display behaviour suggestive of jealousy. In a total of 119 experiments, 81 (68%) gave positive indications of telepathic connection. Of 15 control experiments in which the horses were hostile to each other only one gave positive results.^[8]

Aristide Esser

In the early 1970s, American psychiatrist Aristide Esser conducted studies of telepathy in dogs, using separate rooms that were well proofed for sound and vibration. He placed the owner of pet beagles in one room and the dogs in the other and had the owner fire an airgun, observing the animals' reaction: the beagles showed excitement at each shot, although they could have no sensory awareness of it. In a second experiment a boxer dog in one room exhibited a stress response

when its owners in another was subjected to a startle stimulus at random moments.
[9]

Eugene Marais

South African naturalist Eugene Marais conducted experiments in the 1920s on termite colonies. He created a breach in a termite mound and observed that it was subsequently repaired in such a way that the channels and tunnels matched precisely, even though the insects on one side had no sensory contact with those on the other. Marais repeated the experiment, this time dividing the two halves with a thick metal plate, and similarly observed startling symmetry between the two halves as the repair progressed, as if they were communicating telepathically.^[10]

Parapsychological Investigations

The work of [JB Rhine](#) and his associates at Duke University in the 1930s was mainly concerned with ESP in humans. However, they also carried out extensive surveys of putative psychic behaviour in animals, identifying five categories:

- reaction to impending danger to itself or its owner
- reaction to the death of owner at a distance
- anticipation of owner's return
- homing
- trailing (finding owner in unfamiliar terrain or previously unknown location)

Of these, trailing was the most compelling from an evidential point of view, taking into account witness reliability and positive identification of the animal (deformity, scar or name tag). Over several years, they found 54 cases of cats, dogs and birds that met these criteria.^[11]

Lady Wonder

The Rhine lab tested Lady Wonder, a mare that performed apparently telepathic feats, knocking over alphabet blocks to spell out words that people were thinking. Rhine was careful to prevent unconscious signals from the horse's owner such as subtle whip movements, which sceptics argued caused the effects. The horse scored highly in the first test but failed in the second.^[12]

Animal Precognition

In 1969, French researchers Duval and Montredon^[13] reported highly significant results in support of precognition in mice. Mice were placed in a cage, of which one half was electrified at random times. The objective was to determine whether the mice might anticipate the electrification in advance and avoid discomfort by moving to a safe area. This happened 359 out of 612 times, 53 more than chance expectation ($p < 0.001$).

Intrigued by these data, Rhine asked an associate, Walter Levy, to try to replicate the experiment. Levy obtained highly significant results with this and other protocols involving chicken eggs and gerbils, attempting to influence a random

number generator; however, he aroused the suspicions of colleagues and confessed to having acted fraudulently (see [here](#)).

Helmut Schmidt

Schmidt carried out two studies with animals and lower life forms, using pleasant or unpleasant stimuli to elicit a possible psychokinetic effect. In exploratory tests a cat was placed in a cold room in which there was also a random event generator connected to a heat source. The aim was to determine whether the cat's need for warmth might at all influence the RNG. In a total of 9000 trials 4,615 were in the right direction, where 4,500 would be expected by chance, a significant result, $p < 0.01$.^[14]

In a second experiment, cockroaches were placed on an electric grid connected to a binary RNG, to see if they could influence the RNG to avoid an electric shock. Surprisingly, in both an exploratory and confirmatory experiment the cockroaches received more electric shocks, not fewer as Schmidt had predicted: the confirmatory test gave 13,109 shocks out of 25,600 trials – some 309 more than chance, a significant $p < 0.001$. Schmidt hypothesized that his extreme dislike of cockroaches might have biased the random number generator itself, which if true would indicate experimenter psi.^[15]

Remy Chauvin

Remy Chauvin investigated psychokinesis in young mice using a tychoscope,^[16] a robot-like device that is randomly oriented by micro-electronic noise associated with thermal electron motion at a conducting interface. Each mouse was tested in a retention chamber divided into two halves, with the tychoscope and mice in different halves. Results provided empirical support for the idea that mice could employ PK to move the robot away and avoid the stresses associated with an unknown stimulus. (Chauvin also published under the pseudonym Pierre Duval; see Duval and Montredon above.)

René Peoc'h

René Peoc'h carried out successful experiments exposing newly hatched chicks to a tychoscope, of a more sophisticated design than the one used by Chauvin.^[17] These young chicks imprinted on the robot as they would with their mother. In the first experiment the robot spent 2.5 times more time near the cage that contained the chicks than when the chicks were absent. There was no effect with non-imprinted chicks, suggesting an effect of connection rather than mere physical proximity of the chicks to the robot.^[18]

In another experiment, the possibility was tested of chicks exerting a psychokinetic influence on a tychoscope carrying a lighted candle in an otherwise darkened room. Eighty groups of 15 chicks each were tested: in 71% of cases the robot spent excessive time near the chicks, but followed random trajectories when they were absent. The results were statistically significant at $p < 0.01$.^[19]

Chester Wildey

Chester Wildey, a graduate student in electrical engineering at the University of Texas, carried out 231 trials with earthworms,^[20] creating a mechanical vibration by means of an audio speaker to act as an emotional stimulus. Wildey used an impedance bridge to accurately measure the conductivity of the worms, finding that they registered noticeable changes a second before they were vibrated. This finding appears to agree with previous presentiment research with humans. The more trials that were collected, the more the data agreed with the presentiment hypothesis.

Fernando Alvarez

Fernando Alvarez, at the University of Seville, Spain, tested for evidence of precognitive behaviour in Bengalese finches. The birds were transferred one at a time into a cage, and, after a 15-minute acclimatization period, were exposed at a randomly determined time to a monitor image of a horse-shoe whip snake, a predator whose presence typically evokes a strong distress signal. The birds were continuously filmed, and alarm responses that occurred 0-3, 3-6, and 6-9 seconds before exposure to the snake stimulus were recorded blindly, by assistants unaware of whether the birds belonged to the experimental group or a control group that was not exposed to the stimulus. The finches displayed clear indications of precognizing the appearance of the snake to a high level of significance ($p < 0.0001$) on different measures.^[21]

Alvarez carried out a replication study with Zebra finches using a gunshot to elicit a fright response, with significant results.^[22]

Rupert Sheldrake

Rupert Sheldrake has referred to animal behaviour to support his theory of morphic resonance, a process in which self-organising systems, biological and inorganic, acquire a memory from the behaviour of processes and organisms that existed before. In this theory, every individual life form inherits a collective memory from previous members of the species, and contributes to the evolving collective memory, thereby affecting other members of the species in the future. Potential examples include the ability of termite communities to build similar structures independently and birds flocking almost in unison.^[23]

Sheldrake cites an example from mainstream research in which rats are tested for their ability to escape a tank of water, either through an illuminated gangway that results in an electric shock or through one that is pain-free but not illuminated. Over successive generations the rats learn to escape the pain-free route in quicker times. Significantly, the learning seems to exist among rats in independent batches, as if they are accessing it from ancestral experiences in the morphic field.^[24]

Sheldrake has carried out extensive research testing with animals. Some examples follow.

Anticipatory Behaviour in Dogs

Many dog owners comment on waiting behaviour that suggests to them their pet knows when they are about to come home. Sheldrake investigated a dog called

[Jaytee](#), collaborating with its owner to film its behaviour during her absence, from the moment of her departure until her arrival, which occurred at randomly selected times. More than a hundred sessions were recorded on video and analyzed. Jaytee was found to spend 4% of the total period at the porch window, and 55% of the time during the period when she was returning, a significance level of $p < 0.0001$. This experiment was replicated on a minor scale by psychologist Richard Wiseman, a psychologist at the University of Hertford, who filmed four sessions. Wiseman, a prominent media sceptic, carried out an analysis according to his own more complex criteria and claimed that there was no anticipatory knowledge; Sheldrake counter-argued that Wiseman's data in fact matched his own.^[25] (Detailed description [here](#))

Telepathic Parrots

N'kisi, a pet African Grey parrot that had been taught a large vocabulary of English words, was said by its owner routinely to vocalize unstated thoughts in her mind. To test this, Sheldrake separated parrot and owner in rooms on different floors, precluding sensory contact between the two. During two-minute trials in which both were continuously filmed, the owner concentrated on a randomly chosen picture while the parrot's vocalizations were recorded. After 149 trials, the recordings were transcribed and given to three independent judges. Using a majority scoring method, N'kisi's vocalizations matched the photographs to a high degree of statistical significance $p < 0.0002$.^[26]

Surveys of Perceptive Pets

Sheldrake has conducted surveys into animal psi. One telephone survey was carried out in London to find out the degree to which pet owners had experienced telepathy with their pets. Results suggested that 52% of dog owners and 24% of cat owners claimed that their animals knew in advance when a member of the household was on the way home. Of these, 20% said their animals detected their return within ten minutes of their having decided it, in agreement with the Jaytee experiment (above). In addition, 40% of dog and cat owners believed their pets could detect their silent commands. Similar findings resulted from surveys conducted in northwest England and California.^[27]

Animals in PK Experiments

Animal psi research also covers the use of animals as targets in psychokinesis and healing experiments.

Mouse Ether Studies

In the early 1970s, Graham and Anita Watkins performed experiments at the Rhine Research Centre investigating the ability of healers to awaken anaesthetized mice from behind a thick glass plate. The healers were able to arouse a mouse, one selected from a pair at random, to a significant degree ($p < 0.0001$).^[28]

Oskar Estebany

In the 1960s, McGill University's Bernard Grad tested the ability of healer Oskar Estebany to heal injured mice by focused attention. The treated mice healed faster than the controls to a significant degree. When the cages were insulated under heavy bags there was no healing effect, indicating a local mechanism.^[29] (See also [William Bengston and Energy Healing](#))

Long-distance PK

Lesniak investigated the ability of healers to transmit healing energy over long distances to non-human primates to heal self-inflicted wounds. These healed faster than the control group, and other physiological measures and behaviours differed significantly between the treated and untreated groups.^[30]

Evolution of Psi

Comparison of the findings of animal and human psi studies can potentially indicate whether humans are becoming progressively more attuned to latent psi abilities that also exist in lower evolved animals, or rather are evolving out of abilities they no longer need in their technologically sophisticated societies. The data show no strong movement in either direction, with similar size effects seen among both humans and animals; however, they are as yet too limited to allow firm conclusions in this regard.

Future Developments

Given the evolutionary basis of psi in animals as a means to promote survival, notably by warning of predators, future experimentation might usefully aim for increased ecological validity, replicating situations found in the wild. For example, the behaviour of mice might be studied when they are being observed by hungry feral cats, in the strict absence of sensory channels that would make them aware of this. Such experiments would combine the rigour of the lab with more naturalistic conditions.

Animal psi research may also benefit from technological advances. The increasing miniaturization of biosensors offers an opportunity for real-life precognition research; for instance, the physiology of rodents could be tested for signs of an ability to precognize where food will be presented. Also, Internet streaming could enable mass participation in animal psi experiments, enabling hundreds or even thousands of participants to focus attention on potential psi behaviours among a variety of animals.

Michael Duggan

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Endnotes

Footnotes

1. ^ Sheldrake (2009).
2. ^ Sheldrake (2005).
3. ^ Jamieson (2016)
4. ^ Cheung (2010).
5. ^ Gross (2013).
6. ^ Laskow (2017).
7. ^ Sheldrake (2002).
8. ^ Blake (2011).
9. ^ Sheldrake (2002).
10. ^ Sheldrake (2002).
11. ^ Rhine & Feather (1962).
12. ^ Dutton & Williams (2009).
13. ^ Duval & Montredo (1968).
14. ^ Schmidt (1970).
15. ^ Schmidt (1970).
16. ^ Chauvin (1986).
17. ^ Peoc'h (1986).
18. ^ Peoc'h (1995).
19. ^ Peoc'h (1995).
20. ^ Wildey (2002).
21. ^ Alvarez (2010).
22. ^ Alvarez (2010).
23. ^ Sheldrake (2012).
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25. ^ Sheldrake (2000).
26. ^ Sheldrake (2003).
27. ^ Sheldrake (1998).
28. ^ Watkins & Watkins (1974).
29. ^ Grad (1965).
30. ^ Lesniak (2006).

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